Aeronautics Educator Guide			
2009 Mathematics			
Standards of Learning			
Virginia Mathematics			
Grade 2			
Activity/Lesson	**State**	**Standards**	
Air Engines (12-16)	VA	MA.2.2.11.a	The student will estimate and measure length to the nearest centimeter and inch
Flight: Interdisciplinary Learning Activities (76-79)	VA	MA.2.2.4.a	The student will count forward by twos, fives, and tens to 100, starting at various multiples of 2, 5, or 10
Flight: Interdisciplinary Learning Activities (76-79)	VA	MA.2.2.19	The student will analyze data displayed in picture graphs, pictographs, and bar graphs.
We Can Fly, You and I: Interdisciplinary Learning (107-108)	VA	MA.2.2.19	The student will analyze data displayed in picture graphs, pictographs, and bar graphs.
Dunked Napkin (17-22)	VA	MA.2.2.18	The student will use data from experiments to predict outcomes when the experiment is repeated.
Dunked Napkin (17-22)	VA	MA.2.2.19	The student will analyze data displayed in picture graphs, pictographs, and bar graphs.
Paper Bag Mask (23-28)	VA	MA.2.2.16	The student will identify, describe, compare, and contrast plane and solid geometric figures (circle/sphere, square/cube, and rectangle/rectangular prism).
Paper Bag Mask (23-28)	VA	MA.2.2.18	The student will use data from experiments to predict outcomes when the experiment is repeated.
Wind in you Socks) (29-35)	VA	MA.2.2.11.a	The student will estimate and measure length to the nearest centimeter and inch
Right Flight (52-59)	VA	MA.2.2.18	The student will use data from experiments to predict outcomes when the experiment is repeated.
Aeronautics Educator Guide			
2009 Mathematics			
Standards of Learning			
Virginia Mathematics			
Grade 3			
Activity/Lesson	**State**	**Standards**	
Air Engines (12-16)	VA	MA.3.3.9.a	The student will estimate and use U.S. Customary and metric units to measure length to the nearest 1/2-inch, inch, foot, yard, centimeter, and meter
Air Engines (12-16)	VA	MA.3.3.9.b	The student will estimate and use U.S. Customary and metric units to measure liquid volume in cups, pints, quarts, gallons, and liters

Air Engines (12-16)	VA	MA.3.3.9.c	The student will estimate and use U.S. Customary and metric units to measure weight/mass in ounces, pounds, grams, and kilograms; and
Rotor Motor (69-75)	VA	MA.3.3.17.b	The student will construct a line plot, a picture graph, or a bar graph to represent the data; and
Rotor Motor (69-75)	VA	MA.3.3.17.c	The student will read and interpret the data represented in line plots, bar graphs, and picture graphs and write a sentence analyzing the data
Making Time Fly (80-86)	VA	MA.3.3.17.a	The student will collect and organize data, using observations, measurements, surveys, or experiments
We Can Fly, You and I: Interdisciplinary Learning (107-108)	VA	MA.3.3.11.b	The student will determine elapsed time in one-hour increments over a 12-hour period
Dunked Napkin (17-22)	VA	MA.3.3.17.a	The student will collect and organize data, using observations, measurements, surveys, or experiments
Dunked Napkin (17-22)	VA	MA.3.3.17.c	The student will read and interpret the data represented in line plots, bar graphs, and picture graphs and write a sentence analyzing the data
Paper Bag Mask (23-28)	VA	MA.3.3.14	The student will identify, describe, compare, and contrast characteristics of plane and solid geometric figures (circle, square, rectangle, triangle, cube, rectangular prism, square pyramid, sphere, cone, and cylinder) by identifying relevant characteristics, including the number of angles, vertices, and edges, and the number and shape of faces, using concrete models.
Wind in you Socks) (29-35)	VA	MA.3.3.17.a	The student will collect and organize data, using observations, measurements, surveys, or experiments
Aeronautics Educator Guide			
2009 Mathematics			
Standards of Learning			
Virginia Mathematics			
Grade 4			
Activity/Lesson	**State**	**Standards**	
Air Engines (12-16)	VA	MA.4.4.6.a	The student will estimate and measure weight/mass and describe the results in U.S. Customary and metric units as appropriate; and
We Can Fly, You and I: Interdisciplinary Learning (107-108)	VA	MA.4.4.9	The student will determine elapsed time in hours and minutes within a 12-hour period.
Paper Bag Mask (23-28)	VA	MA.4.4.6.a	The student will estimate and measure weight/mass and describe the results in U.S. Customary and metric units as appropriate; and

Paper Bag Mask (23-28)	VA	MA.4.4.11.a	The student will investigate congruence of plane figures after geometric transformations, such as reflection, translation, and rotation, using mirrors, paper folding, and tracing; and
Wind in you Socks) (29-35)	VA	MA.4.4.6.a	The student will estimate and measure weight/mass and describe the results in U.S. Customary and metric units as appropriate; and